

Product Overview

The Vigor 2866 series is DrayTek's G.Fast / VDSL and Ethernet Multi-WAN Firewall VPN router. Ideally suited to connect directly to Ultrafast G.Fast broadband and Superfast VDSL. Providing advanced Firewall and Content Filtering, Quality of Service and VPN with Gigabit throughput. Wi-Fi is available on 'ac' models and the integrated 4G+ LTE modem on 'Lac' models takes full advantage of mobile broadband. The Vigor 2866 series provides a reliable, flexible, and secure networking solution, that's ideal for Home Offices, Small Business and Satellite Offices.

Key Features & Benefits

G.Fast and Ethernet Load Balancer

Connect the Vigor 2866 to Ultrafast G.fast and Superfast VDSL2 FTTC with integrated DSL modem. Load Balance with Ethernet WAN and more for greater resiliency and higher throughput.

Benefits: Future Proof DSL Router. High speed DSL & Gigabit CPE with flexible application.

Dual-SIM 4G+ LTE Modem

Provide resilient Internet connectivity and VPN with integrated high speed 4G+/LTE Category 6 modem on 'L' models. Plan for Mobile network outages with Dual-SIM Failover.

Benefits: Fast and Convenient Mobile Broadband. Ensures a reliable connection.

Feature Packed Router

Take advantage of DrayTek's rich feature set and useful functionality such as Quality of Service, Route Policy, Hotspot Web Portal, VPN Matcher, DrayDDNS and more.

Benefits: Advanced DrayTek router functionality solves many complex networking issues.

High-Performance VPN Router for SMB

Securely connect remote sites at high speed, up to 32 VPN tunnels. Connect remote workers to network resources and secure connectivity, with DrayTek SSL VPN and OpenVPN support.

Benefits: Fast and Secure network access to enable working from home and remote work

5+1 Gigabit LAN Ports with VLANs

Link Computers, Server and Network Storage directly with up to 6 Gigabit LAN ports. VLANs can serve as many as 8 separate networks, with options Hotspot Captive Portal & guest networks.

Benefits: Improve quality of service for private and guest data traffic. Connect more devices.

VigorACS SD-WAN Central Management

Manage the Vigor 2866 remotely and utilise DrayTek's powerful SD-WAN features with the VigorACS 3 management platform. Centrally manage & provision whole networks across multiple sites.

Benefits: Save time and money. Provision, manage and monitor remote sites easily, without on-site IT or dedicated staff.





Key Specification

- Multi-WAN Gigabit Performance Router with Load-Balancing & Failover
- Up to 950Mbps Firewall Throughput for Ethernet WAN
- 5+1 Gigabit RJ-45 LAN Ports
- Up to 800Mbps VPN Throughput with IPsec acceleration

- 4G/LTE with dual-SIMs for second backup telco ('L' models)
- AC1300 11ac 'Wave 2' Dual Band Wireless with Mesh ('ac' models)
- 8 LAN Subnets with VLANs (Port-based / 802.1g)
- SPI Firewall and Content Filtering
- Optional VigorCare Available



Technical Specification (UK Hardware Spec.)

Physical Interfaces

- WAN1: Gfast / VDSL2 / VDSL2 35b / ADSL2+, RJ-11
 WAN2/LAN Switchable Port: 1x Gigabit Ethernet (1G/100M/10M), RJ-45
 LAN Ports: 5x Gigabit Ethernet (1G/100M/10M), RJ-45
- 2x USB 2.0 Ports for 3G/4G Modem, thermometer or Printer or 1x USB 2.0 Port ('L' models)

- 2x Removable Wireless antennas (wireless models) 2x Removable 4G/LTE Wireless antennas ('L' models) Wireless On / Off / WPS button
- Recessed Factory Reset button

Antenna Specifications

- Wireless Antennas (wireless 'ac' models):
 - 2x External Dipole Antennas 5GHz Gain: 4.5 dBi 2.4GHz Gain: 5 dBi

 - RP-SMA fitting antenna connectors
- LTE Antennas ('L' models):
 - 2x External Dipole
 - 2x 1m extension base included
 - Gain: 3 dBi
 - SMA fitting antenna connectors

Performance

- NAT Performance:
 - 1.3Gb/s Max Sync Rate with G.fast (dependant on ISP & Exchange equipment)

 - 100 Mb/s Max Sync Rate with VDSL2 300 Mb/s Max Sync Rate with VDSL2 35b 950 Mb/s NAT Throughput for Ethernet WAN with Hardware Acceleration
 - 1.8Gb/s Total Multi-WAN NAT Throughput
 - 700 Mb/s NAT Throughput per WAN without Hardware
 - Acceleration 60.000 NAT Sessions
 - 8000 Hardware Accelerated NAT Sessions
- VPN Performance:
 - 300 Mb/s IPsec (AES256) VPN Performance
 - 800 Mb/s Hardware Accelerated IPsec VPN Performance New!
 - 130 Mb/s SSL VPN Performance
 - Max. 32 Concurrent VPN Tunnels
 - Max. 16 Concurrent SSL VPN / OpenVPN Tunnels

WAN Interfaces

- WAN1: G.fast / VDSL2 / VDSL2 35b / ADSL2+
- WAN2: Gigabit Ethernet

- WAN3: 2.4GHz Wireless WAN ('ac' models)
 WAN4: 5GHz Wireless WAN ('ac' models)
 WAN5: 4G/LTE USB Modem (not included)
 or Integrated 4G/LTE Category 6 Modem ('L' models only)
 WAN6: 4G/LTE USB Modem (not included)

Internet Connection

- Load Balancing: IP-based, Session-based Hardware Acceleration
- 802.1p/q Multi-VLAN Tagging
- Multi-VLAN/PVC 2.4GHz & 5GHz Simultaneous Wireless WAN ('ac' models only)
- WAN Active on Demand: Link Failure, Traffic Threshold Connection Detection: PPP, ARP Detect, Ping Detect WAN Data Budget
- Dynamic DNS
- DrayDDNS with automated LetsEncrypt Certificates New!
- Full Feature-set Hardware Acceleration
- Hardware Accelerated Quality of Service
 - Multi-WAN Data Budget
 - Traffic Graph & Data Flow Monitor Bandwidth Limit
- IPv4 Connection Types: PPPoE, DHCP, Static IP, PPTP/L2TP
- IPv6 Connection Types
 - DSL & Ethernet: PPP, DHCPv6, Static IPv6, TSPC, AICCU, 6rd, 6in4 Static Tunnel
 - 4G/LTE Modem & USB 4G/LTE Modem: TSPC, AICCU

G.Fast, VDSL & ADSL Features

- BT Infinity Option 1 & Option 2 Compatible
- Compliant with Openreach SIN 527 & SIN 498 Auto Detection of G.fast, VDSL and ADSL line modes Support for G.INP & Vectoring

G.Fast Standards

- ITU-T G.9700, G.9701 G.fast
- Profile: 212MHz & 106MHz

VDSL Standards

- ITU-T G.993.1 VDSL ITU-T G.993.2, G.997.1 VDSL2 Band Plan: G.998, G.997
- Annex A, Annex B, Annex C
- VDSL2 Profile: 8a, 8b, 8c, 8d, 12a, 12b, 17a, 35b OLR, UPBO, DPBO Supported
- **USO Supported**
- Loop Diagnostic Mode DSL Forum WT-114

ADSL Standards

- ANSI T1.413 Issue2
- ITU-T G.992.1 G.dmt (ADSL) ITU-T G.992.2 G.lite ITU-T G.992.3 ADSL2

- ITU-T G.992.5 ADSL2+



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ATM Protocols

- RFC-2684/RFC-1483 Multiple Protocol over AAL5 RFC-2516 PPP over Ethernet RFC-2364 PPP over AAL5

- Support for RFC4638 for MTU up to 1500

- Integrated 4G LTE Modem Features ('L' models)

 Dual-SIM Failover (1 SIM online at a time)

 4G LTE Category 6 Modem with fallback to 3G / GPRS

 Unlocked to any network (BT, EE, 3, 02, Vodafone, Eircom)

 4G LTE Max Data Rates:

- 4G LTE Max Data Rates:
 300Mbps Downlink (Category 6)
 50Mbps Uplink (Category 6)
 4G LTE (FDD) Bands: 1, 3, 5, 7, 8, 20, 28, 32
 4G LTE (TDD) Bands: 38, 40, 41
 3G (WCDMA/HSPA+/UMTS) Bands: 1, 3, 5, 8
 2x LTE Antennas included with 1m extension cables
- Per-SIM-Card WAN Data Budget
- 2x Standard-Size SIM-Card Slots
- Removable SIM slot cover
- SMS Inbox Send & Receive SMS text messages SMS Router Commands Status Report, Reboot via text message
- LTE Bridge New!

- Wireless Features ('ac' models)AC1300 11ac 'Wave 2' Dual Band Wireless ('ac' models):

 - 802.11ac 2x2 wireless access point
 Compatible with 802.11a/b/g/n wireless
 Dual-band (2.4/5Ghz) simultaneous wireless
 Up to 866Mbps PHY rate at 80MHz with 5GHz
 Up to 400Mbps PHY rate at 40MHz with 2.4GHz (256-0AM)
 - Channel Bandwidth: 20/40MHz for 2.4GHz, 20/40/80MHz for 5GHz MU-MIMO

- Tx Beamforming
 Mesh Root support with DrayTek VigorAP Mesh Nodes New!
 Up to 4 SSIDs per radio band
 Extended 5Ghz Band Channels 36-48, 52-64, 100-140
 - Wireless Optimisation: Airtime Fairness, AP-Assisted Mobility, Band

- Bandwidth Management (Per Station / Per SSID)
 WMM (Wireless MultiMedia)
 WPS WiFi Protected Setup
 Station Control Time limited wireless connectivity per Station (e.g. 1
- EAPOL Key Retry Disable EAPOL Key Retry to protect unpatched WLAN clients from KRACK
- Wireless Security:
 WPA2

 - WPA3 New!

 - Pre-Shared Key authentication Enterprise 802.1x authentication

 - WEP/WPA for Legacy Clients
 Access Control Blacklist / Whitelist client MAC addresses per

- DoS Attack Defence Spoofing Defence
- - Web Features
 - Web Category Filter (requires GlobalView subscription)

- NAT FeaturesNAT Port Redirection
- Open Ports Port Triggering
- DMZ Host
- ALG (Application Layer Gateway): SIP, RTSP, FTP, H.323 VPN Pass-Through: PPTP, L2TP, IPsec

- LAN Management
 802.1q Tag-based, Port-based VLAN
 Up to 8 LAN Subnets (NAT or Routing mode selectable per LAN
- Up to 16 VLANs
- DMZ Port DHCP Server:

 - Multiple IP Subnet Custom DHCP Options Bind-IP-to-MAC

 - DHCP Pool Count up to 1022 addresses for LANs 1-3 DHCP Pool Count up to 253 addresses for LANs 4-8 DHCP Relay per LAN
- LAN IP Alias
- Wired 802.1x Port Authentication
- Port Mirroring Local DNS Server
- Conditional DNS Forwarding
- Hotspot Web Portal
- Hotspot Authentication: Click-Through, Social Login, SMS PIN, Voucher PIN, RADIUS, External Portal Server

- Networking Features
 Policy-based Routing: Protocol, IP Address, Port, Domain/Hostname, Country
- High Availability: Active-Standby, Hot-Standby DNS Security (DNSSEC) Local RADIUS server

- SMB File Sharing (Requires external storage)
 Multicast: IGMP Proxy, IGMP Snooping & Fast Leave, Bonjour
 Routing Features: IPv4 & IPv6 Static Routing, Inter-VLAN Routing, RIP v1/v2/ng, BGP

VPN Features

- Up to 32 active VPN tunnels including up to 16 SSL VPN or OpenVPN
- Up to 16 Hardware Accelerated 800Mb/s IPsec tunnels New!

- Up to 16 Hardware Accelerated 800Mb/s IPsec tunnels **New!**LAN-to-LAN Dial-In VPN Server & Dial-Out VPN Client
 Teleworker-to-LAN Dial-In VPN Server
 User Authentication: Local, RADIUS, LDAP, TACACS+, mOTP
 IKE Authentication: Pre-Shared Key and Digital Signature (X.509)
 Encryption: MPPE, DES, 3DES, AES (128/192/256)
 Authentication: SHA-256, SHA-1
 VPN Trunk (Redundancy): Load Balancing, Failover
 Dead Peer Detection (DPD)
 IPsec NAT-Traversal (NAT-T)

- PSec NAT-Traversal (NAT-T)
 Virtual IP Mapping Resolve VPN IP subnet/range conflicts
 DHCP over IPsec
 DrayTek VPN Matcher Connect to a VPN router that's behind NAT/
 CG-NAT New!
- VPN Protocols:
 - IPsec IKEv1, IKEv2, IKEv2 EAP
 - IPsec-XAuth DrayTek SSL VPN
 - OpenVPN
 - GRE over IPsec
 - L2TP, L2TP over IPsec



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Bandwidth ManagementIP-based Bandwidth Limit

IP-based Session Limit User-based Data Quota

Ouality of Service (OoS)

Classify via TOS, DSCP, 802.1p, IP Address, Service Type

4 Priority Queues

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VoIP Prioritization

Class-based Outbound Traffic Tagging: DSCP & IP Precedence

Local Service: HTTP, HTTPS, Telnet, SSH, FTP, TR-069

Config File Export & Import
Import Config from Vigor 2862 and Vigor 2860
Auto Backup Config to USB Storage – **New!**Firmware Upgrade via TFTP, HTTP, TR-069
2-Level Administration Privilege

Access Control Features: Access List, Brute Force Protection

Syslog SMS, E-mail Notification Alert SNMP: v1, v2c, v3 Managed by VigorACS

Router Central Management Features

AP Management: Up to 20 VigorAP access points
Switch Management: Up to 10 VigorSwitch network switches
VPN Management: Up to 8 Vigor routers
DrayTek Mesh: Up to 7 VigorAP access points – New!

Operating Requirements
Rack Mountable (Optional Vigor RM1 mounting bracket required)

Wall or Shelf Mountable with included fittings

Temperature Operating: 0 °C ~ 45 °C
Storage: -25 °C ~ 70 °C
Humidity 10% ~ 90% (non-condensing)
Power Consumption: 24 watts maximum ('ac' model)
Operating Power: DC 12V (via external PSU, supplied)

Power Requirements: 100-240VAC

Weight: 620g ('ac' model)

Dimensions:

241mm Width

165mm Depth

44mm Height

Warranty

Two (2) Year Manufacturer's RTB

VigorCare Enhanced Warranty Available
 VigorCare B3 3 Year Subscription: VCARE-B3
 VigorCare B5 5 Year Subscription: VCARE-B5

Box Contents

Vigor 2866 series router Quick Start Guide

Screws & wall plugs for wall mounting 2m Cat-5e RJ-45 Network Cable

2x Detachable Wireless LAN Antennas ('ac' models)

2x Detachable LTE Antennas ('L' models) 2x 1m LTE Extension Base ('L' models) DC 12V Power Supply with UK Plug

Vigor 2866 series Router Models

UK Product code	EAN	Product name	Product description
V2866-K	4712909128308	Vigor 2866 (UK/IE)	Vigor 2866 wired G.fast/DSL & Ethernet router
V2866AC-K	4710484743244	Vigor 2866ac (UK/IE)	Vigor 2866ac G.fast/DSL & Ethernet router with AC1300 wireless
V2866LAC-K	4710484740434	Vigor 2866Lac (UK/IE)	Vigor 2866Lac G.fast/DSL & Ethernet router with AC1300 wireless and integrated 4G/LTE modem